

# Retrospective Study of the Incidence of Chronic Subdural Hematoma in Fukuoka University Hospital from 2015 to 2020 and a Case of Chronic Subdural Hematoma due to Maxillofacial Trauma

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## Abstract

Maxillofacial trauma has various causes, including head trauma. However, chronic subdural hematoma (CSDH) is very dangerous since it has a high risk of being overlooked because of its late onset. We herein review the characteristics of CSDH cases that were encountered at Fukuoka University Hospital over the last five years and investigated the relationship with maxillofacial trauma. We also report a case of CSDH that occurred after the treatment of mandible fracture, which was treated in our department. We conducted a study of patients who underwent surgical treatment for CSDH in the Department of Neurosurgery, Fukuoka University Hospital, between April 2015 and March 2020. We thus identified 116 applicable cases with a mean age of  $76.1 \pm 13.2$  years. Sixty percent of the patients were male, and the mean time from injury to onset was  $5.2 \pm 3.8$  weeks. The most frequently observed symptom was gait disturbance, followed by headache. The incidence of CSDH after maxillofacial trauma was 8.6% (10 cases), and the main symptoms were gait disturbance and headache. The mean time from injury to onset was  $7.6 \pm 5.5$  weeks. Among these 10 cases, we present one case of CSDH, which occurred after treatment for mandible fracture in our department. The patient was a 50-year-old man. The patient was diagnosed with left-sided mandible fracture. No abnormal findings were noted in any other part of the body, including the head. Surgical fixation was performed under general anesthesia in our department. Seven weeks after treatment, the left mandible fracture had progressed well, but the patient complained of mild headache and paresthesia of the fingers. Head magnetic resonance imaging indicated the onset of CSDH. Although the incidence of CSDH due to maxillofacial trauma is small, it may be safe to follow patients carefully for a relatively long period of time (specifically for about 8 weeks). When headache and gait disturbance are observed, especially in elderly male patients, the possible onset of CSDH should be considered.

**Key words:** chronic subdural hematoma, headache, mandible fracture, maxillofacial trauma